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IOWA CONSERVATIONIST

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NUMBER 6

STATE FORESTRY GROWS IN IOWA

RESUME OF NEW LAWS RELATIVE TO CONSERVATION

**MOST BECOME EFFECTIVE
JULY 4**

By K. M. Krezek
Chief, Division of Administration

ALTHOUGH there were few changes in the statutes affecting conservation passed by the last legislature, there were some laws enacted that are of interest and importance to the general public. Some of these laws became effective upon publication and are now in force. The majority, however, do not become law until July 4. The following is a brief explanation of new laws passed and changes made in existing laws, together with the date each goes into effect:

House File 62 amends Section 5413, Code 1939. A bill to increase bounty on adult wolf from five to ten dollars and on cub wolf from two to four dollars, to be paid by counties. Effective on publication, March 23, 1945.

House File 187 amends Section 1794.082, Code 1939, relating to non-resident fish and game licenses. This act provides for reciprocity in the issuance of non-resident fish and game licenses.

1. Non-resident hunting and non-resident fishing licenses. Any non-resident shall be charged for such license the same fee that the state of the applicant's residence charges a resident of Iowa for a non-resident license, providing that such fee shall not be less than \$5.00 for a hunting license and \$3.00 for a fishing license. If the state of the applicant's residence does not provide for non-resident licenses the fee shall be said minimum of \$5.00 and \$3.00 respectively.

2. Non-resident trapping licenses.

(Continued on page 138)



The scenic bluff lands along the Mississippi River in Allamakee County are ideal for public forests. Some of the areas have already been purchased, and while producing usable crops of timber, they are keeping valuable soil anchored and are ideal for wild-life and recreational purposes.

Some Common Iowa Butterflies

By Harry H. Knight
Zoology Department, Iowa State
College

AMONG the animals known as insects perhaps none attracts more attention than the airy fairies we call butterflies. These insects appear large with their widely expanded wings and display beautiful and distinctive colors; they float about gracefully and easily with little effort, frequently visiting flowers from which they sip nectar to supply their food requirements. Perhaps some 50 odd kinds of butterflies occur in Iowa, but only a few are sufficiently abundant to be noticed by the average person. Since space is limited we

will be able to consider only a few of these.

Mourning Cloak ($\frac{1}{2}$ natural size)

Probably the first butterfly we observe on the wing in early spring is the Mourning Cloak; it may be

(Continued on page 139)



ACQUIRING STATE FORESTS

By G. B. MacDonald
State Forester

(Editor's Note: This is the second of five articles on state forestry in Iowa. The first, in the April 15 "Iowa Conservationist," was titled "The Early Period." Subsequent titles will be: "Present State Forests", "Multiple Use of State Forests", and "Administration and Management.")

IN THE dawn of the conservation movement, individual owners were allowed to "sink or swim" in handling natural resources. True, plenty of advice was available concerning the dire results which would follow destructive policies—timber shortage, gullied farms, abandoned lands, Gobi deserts, waning civilizations, etc.—but cooperative governmental programs were lacking. The pioneers in lumbering, as well as in agriculture, were individualists and were inclined to do as they "darned pleased" with their own lands.

Notwithstanding the rugged individualists to whom we owe so much, a sentiment was growing. Perhaps we all had a stake in our natural resources. Was it possible that where individual means were not at hand for the best protection and management of private lands that the community as a whole might assist? That it could and should assist was particularly evident in connection with forest fires, which appeared to have little regard for property boundaries.

Clarke-McNary Act

An Act of Congress in 1924, the Clarke-McNary Act, is a good example of a cooperative effort between the federal government, the states, and private individuals in one of the difficult conservation problems, forest fire control. This act recognized the fact that the

(Continued on page 142)

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OHIO HAS \$12,000,000 FOR POSTWAR WILDLIFE PROJECTS

Ohio has blueprinted her postwar wildlife projects and has \$12,000,000 with which to do the work. Headwater and recreation lakes and watershed improvements and control come in for the major share of the money. Not every state will be able to allocate this amount of money, but every project, no matter how low in cost, if wisely planned, will benefit wildlife.

—National Wildlife Federation.

THINGS YOU MAY NOT KNOW

A muskrat (musquash) can travel as far as 50 yards under the water without coming up for air. His fur is nearly as fine and dense as that of a beaver. When treated and dyed it may be known as Hudson Seal, Wallaby, Velvet Coney, River Mink, Sealskin and a number of other trade names.

New Laws . . .

(Continued from page 137)

Non-resident trapping license fees shall be determined in a like manner; providing such fee shall not be less than \$10.00; providing further no such license shall be issued to a resident of any state which does not grant non-resident trapping licenses.

3. Non-resident fur dealers licenses. Non-resident fur dealers license fees shall be determined in a like manner providing such shall not be less than \$50.00; providing further no such license shall be issued to a resident of any state which does not grant non-resident fur dealers' licenses.

4. Non-resident net and seine licenses. Non-resident net and seine license fees shall be determined in the like manner providing that the minimum fee shall not be less than the regular Iowa resident net and seine license fee, and providing further no such license shall be granted to a resident of any state which does not grant non-resident net and seine licenses.

5. Non-resident mussel licenses. Non-resident mussel license fees shall be determined in a like manner providing that such shall not be less than \$25.00, providing further no such license shall be granted to a resident of any state which does not grant non-resident mussel licenses. Effective July 4, 1945.

Senate File 129 amends Section 1794.098, 1794.044 and 1794.040 relating to fish and game. The act provides that no hunting, fishing and trapping license shall be required of any person receiving old age assistance under chapter 189.1 as amended, Code 1939; and strikes the word "young" (carp, quillback, gar, dogfish) from Section 1794.044 regarding prohibited bait; and also permits the State Conservation Commission to provide breeding stock of fish for privately owned farm ponds. Effective July 4, 1945.

Senate File 82 amends chapter 94, Acts of the 50th General Assembly and Section 1794.036, Code 1939, relating to the taking of fish with seines, trot lines, and throw lines. The act provides that it will be unlawful to use trot lines and throw lines in the Skunk River north of Highway 30; and corrects the former erroneous description of the location of the LeClair Canal, Scott County, Iowa, in chapter 94, 50th General Assembly. Effective July 4, 1945.

House File 183 amends Section 1703.50, Code 1939. This act authorizes the State Conservation Commission to provide for the protection against fire or other destructive agencies on state and privately owned forest and wildlife areas; and to cooperate with the federal and other state agencies in protection programs approved by the Conservation Commission and with the consent of the owner on privately owned areas. Effective July 4, 1945.

House File 193 amends Section 1421 and Section 1422, Code 1939. An act to provide for compensation to be paid conservation officers and peace officers disabled or killed while performing official duties. Effective July 4, 1945.

House File 392 amends Section 1703.32, 1703.39 and 1703.40, Code 1939, an act to provide for increase in compensation for conservation officers from \$1,500 to \$1,800 per year; for each member of the Conservation Commission from \$7.50 to \$10.00 per day actually employed in official duties, and further provides the maximum compensation received each fiscal year increased from \$500 to \$600 per year; for the increase of salary of the Director from \$4,000 to \$4,800 per year.

This act shall be in force from July 1, 1945, to June 30, 1947.

House File 250 amends Section 308.5, Code 1939. An act to provide for five (5) cents per mile compensation to state officials and employees for use of an automobile on official business. Effective on publication April 13, 1945.

Senate File 405, a bill appropriating to the State Conservation Commission for maintenance and upkeep of state parks and preserves amounting to \$290,000 per year, of which \$40,000 of this is earmarked for lake and stream improvement. This bill is effective for the two years of the biennium commencing July 1, 1945, and ending June 30, 1947.

Senate File 289, an act authorizing conveyance of the state title and interest in the Iowa Great Lakes Sewage Disposal System in Dickinson County, Iowa. Effective on publication April 19, 1945.

Senate File 290, an act relating to the Iowa Great Lakes Sewage Disposal System in Dickinson County, Iowa; defining the State's title and jurisdiction in respect thereto; providing for the operation and maintenance thereof; and prescribing the powers and duties of the State Conservation Commission in relation thereto. Effective on publication April 19, 1945.

House File 178, an act appropriating \$6,038.62 in payment of special assessment for drainage purposes imposed upon state-owned lands in Drainage District No. 13 of Muscatine County, Iowa. Effective July 4, 1945.

House File 416, a bill authorizing the State Conservation Commission to purchase and pay for certain real estate (Allerton Reservoir) in Wayne County, Iowa, and provides the supervision thereof. Effective on publication April 27, 1945.

The beaver is the largest member of the rodent family.

Robin Family Provides an Unusual Story for Ripley

WE DON'T expect our readers to believe this yarn. We were slow to accept it, too, when we first heard it. But skepticism disappeared when we went to investigate and found tangible evidence that every word is the truth—so help us.

Naturalists tell us that wild animals, including birds, have a sort of sixth sense that tells them when they are in danger. This same talent enables them to know who their friends are. That basic fact must be understood in order to believe this story.

A family of robins in the southwest part of town decided that Oscar H. Olson, Osage garbage hauler, was a friendly soul who loved birds. Having decided that Oscar was their friend, Mr. and Mrs. Robin picked out the garbage wagon as a safe place to build a nest. The birds decided to build the new family home on the forehead of the wagon, and construction immediately got under way.

Mr. Olson first discovered the nest when he measured the wagon for a new tongue after an accident two weeks ago. There, firmly planted on the hound, was a brand new nest—and three little blue eggs.

Now Mr. Olson has to collect garbage three times a week, and he wondered if Pa and Ma Robin would object to his borrowing the wagon for his work, but he decided to go right ahead without disturbing the birds. Mother Robin would fly from the nest when Oscar hitched up the team and the eggs would make the garbage route. The mother would be waiting when the wagon returned and she would again take up her vigil on the eggs.

Sunday morning, April 29, the eggs were gone. In their place were three baby robins, crying for food. The fledglings rode the "garbage run" three times last week with Mr. Olson, but last Friday morning two of them were gone. Perhaps they decided they were old enough to run away from home.

Pop knew that his offspring would be hungry from the ride and was always waiting to feed the little fellows as soon as the team was unhitched after the trip. The old lady wasn't far away to see that they all were properly taken care of and ate with proper manners.

Well, that's the story and, as Ripley would say, "Believe it or not."

—Osage Press.

"No man is really happy or safe without a hobby, and it makes precious little difference what the outside interest may be—botany, beetles or butterflies, roses, tulips or irises; fishing, mountaineering or antiquities—anything will do so long as he straddles a hobby and rides it hard."

—Sir William Osler.

Butterflies . . .

(Continued from page 137)

Recognized by the dark maroon to blackish color with yellow border on the wings. This species is well distributed over the whole northern hemisphere between the Arctic Circle and 30th parallel. Unlike most butterflies, the adults live through the winter by hiding in hollow trees, piles of logs, or even barns and culverts. When the leaves of willow, poplar and elm begin to unfold, the female butterfly lays groups of 10 or a dozen eggs on the twigs or leaves. About two weeks later the eggs hatch into tiny, black spiny caterpillars. These eat the tender leaves and, as they grow larger, molt or shed their skin from time to time, thus gaining increase of size. The caterpillars are gregarious and move from branch to branch as they strip the leaves in feeding. Within four or five weeks the grown caterpillar is about $1\frac{1}{2}$ inches long, largely black and covered with rows of spines. It is now ready to transform into the next stage. The full-grown caterpillar seeks a protected place, often behind loose or rough bark, and transforms to the chrysalis. The chrysalis of butterflies corresponds to the pupa of moths, bees and flies. While the chrysalis is outwardly inactive, wonderful physiological changes take place within while building up body tissues of the forthcoming butterfly. Within two weeks the chrysalis is ruptured by the emerging adult, which crawls out and hangs suspended for several minutes while the wings expand and the fully developed butterfly prepares for flight. The July brood of butterflies soon lay eggs for a second generation of caterpillars. These transform to adults by fall, and with the coming of cold weather the butterflies seek hiding places in which to pass the winter.



The Cabbage Butterfly
(natural size)

The cabbage butterfly was originally a European species which made its first appearance in North America at Quebec about 1860. In just a few years it had spread throughout the eastern states and now may be expected everywhere cruciferous crops are grown. This is a medium-sized butterfly, white in color, with one or two spots and dark tips to each front wing. Victory gardeners and others who grow cabbage are sure to see these white butterflies hovering about the cabbage plants, and if one will watch, the act of laying eggs may

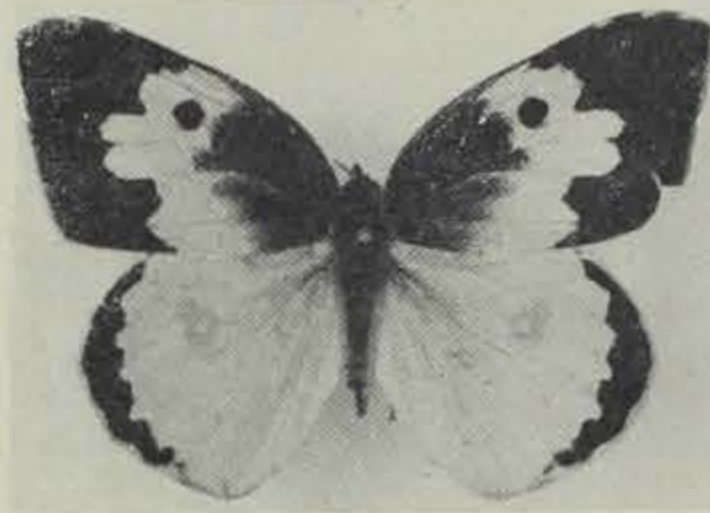
be observed. The egg is lemon yellow in color, nearly $\frac{1}{25}$ inch in length and attached to the leaf by one end; there are vertical ridges and transverse reticulations which make it a beautiful object to observe under a lens. The egg hatches in about a week and the pale greenish yellow caterpillar begins feeding on the under side of the leaf. When the plants are heading, the caterpillars often burrow rather deeply into the tenderest young leaves. After 10 to 14 days of feeding, the mature caterpillar is about an inch in length, velvety green in color, and marked with a greenish yellow stripe down the back. It is now ready to pupate and seeks a sheltered place, under a cabbage leaf or other objects such as fence posts and outside walls of buildings. When ready to transform, the caterpillar first spins a carpet of silk over the surface chosen, then spins a delicate silken girdle around its body at the middle, thus holding itself firmly in position. When the transformation is complete, the chrysalis is held in place by this girdle and the spines at the tip of the abdomen which engage the silk carpet, all very suggestive of the lineman who climbs telephone poles with metal spurs. The pupa is about four-fifths of an inch in length, pale green to yellowish brown in color. The new butterfly may come forth in a matter of 10 days, except in case of those chrysalides which are formed in late fall for passing the winter. Cabbage worms are best controlled in the garden by dusting with one of the rotenone insect powders.



Roadside Butterfly or Clouded Sulphur
($\frac{3}{4}$ natural size)

This medium-sized butterfly is pale greenish-yellow above, with the outer borders blackish-brown; the border is broader on the front wings of the female and contains a row of yellow spots. From mid-summer on, one may see this yellow butterfly swarming over clover fields where eggs are laid and the caterpillar develops. It is perhaps our most abundant butterfly, and may be seen everywhere, and in countless numbers. For those who travel country roads one may often see large yellow blotches about puddles or damp spots which, upon close approach, scatter and fill the air with hundreds of pale yellow butterflies. This roadside butterfly generally outnumbers all others in such gatherings of thirsty insects. These fluttering creatures love the bright sunshine, for it takes but a few dark clouds to send them scur-

rying to the underside of a leaf, where they find protection from the weather or darkness of night.



The Dog's-head
($\frac{7}{8}$ natural size)

This is a golden yellow butterfly with distinctive figures on the front wings; some say the pattern resembles a dog's head and others say the figure is more like a duck in the act of quacking. The species is more abundant in the southern states, but is often seen in Iowa. The leaves of lead-plant serve as food for the caterpillars, and a superstition has been handed down that wherever this plant grows lead is to be found; whereas the truth is, wherever it is found, there also are golden butterflies.



The Monarch
($\frac{1}{2}$ natural size)

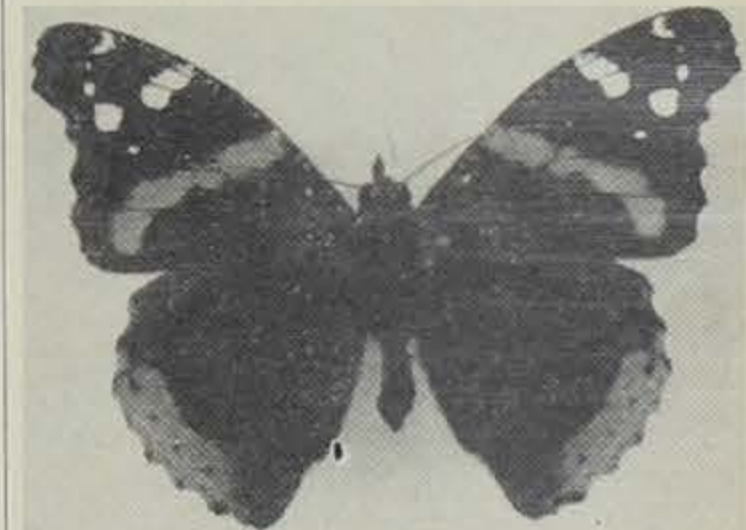
The color of this common large butterfly is a red brown, with borders and veins black, and two rows of white spots around the margins. It is a widely distributed butterfly, for it covers America from the Arctic southward and has pushed out to islands of the Pacific and to Europe. It is the strongest flyer among butterflies, for it explores over land and ocean, having been seen flying serenely along some 500 miles from land. In North America, when cool weather of fall approaches, these emigrant butterflies gather in great flocks and move southward in great migrations like the waterfowl. At night the flight is interrupted and thousands of these butterflies may gather on trees literally covering the branches with living red brown leaves. When the sun comes out warm, they resume their easy flight southward. The winter is spent in the far south, but in spring when milkweed plants grow green again, the Monarch may be seen hovering around the plants and laying eggs. The caterpillars are white and have narrow black and yellow cross stripes, and when full grown are nearly two inches in length. The chrysalis is generally attached to the underside of a leaf, emerald green in color and decorated with

gold trimmings. Examine the milkweed plants and you are sure to find them.



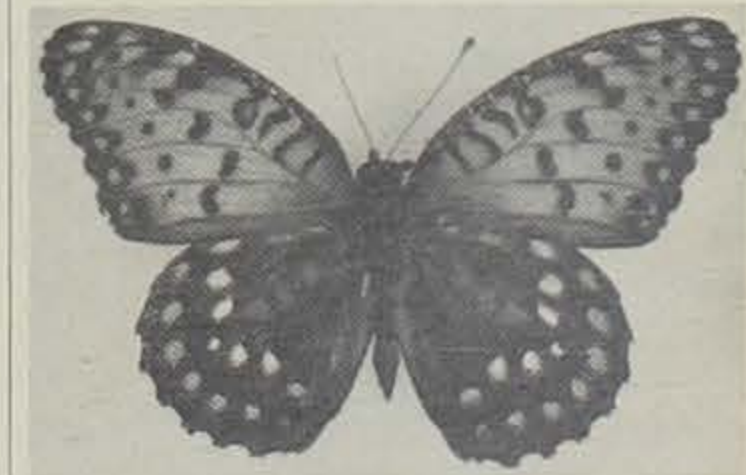
The Viceroy
($\frac{1}{2}$ natural size)

The wings of this butterfly are yellow orange to red brown, having veins and borders black. There is a remarkable resemblance to the Monarch, but the hind wing is distinctive in having a transverse black band across the middle. It is believed that the resemblance of these two species is not entirely accidental, but a matter of natural selection in nature. The Monarch butterfly is distasteful to birds and is usually left severely alone. The Viceroy belongs to a family which is readily taken by birds, but in the case of this species the resemblance to the Monarch gives it immunity from feeding birds. Several instances of this type of unconscious mimicry are known among butterflies of the tropics.



The Red Admiral
($\frac{3}{8}$ natural size)

The wings are purplish black above; on the fore wing there is a bright orange colored band across the middle and several white spots on the black wing tips. The caterpillars of this species feed on nettles, sometimes stripping the plant of leaves. There are two broods in a year, and both butterflies and chrysalides may hibernate.



The Regal Fritillary
($\frac{3}{4}$ natural size)

This is a beautiful but rather scarce butterfly in Iowa; it may be distinguished from nearest allies by the frilled front wings, while the hind wings are chiefly black. This is truly a regal creature in

(Continued on page 143)

Famous Iowa Trees

From Local Legend and
Historical Fact



THE BIG SYCAMORE

The "big sycamore" is Iowa's outstanding representative of the species of tree that "grows to the largest size of any deciduous tree on the North American continent." This giant, 22' 11" in diameter at shoulder height, has lived for hundreds of years on the Des Moines River bottoms in Marion County near the town of Red Rock. Growing only a few feet from the road, it may be seen from an automobile by driving three-quarters of a mile upstream on the river road at the south end of the Red Rock bridge. The big sycamore's health is good, although it was almost scared to death by a road improvement a few years ago, which threatened its existence until local citizens' committees prevented its destruction.

The age of this giant is unknown, as is the date of the mound builders which left many traces of their culture in the vicinity. Mounds, pottery fragments, arrowheads, axes and spears have been found in the immediate neighborhood. It is doubtful if the tree dates back to the mound builders, but it is certain, however, that it watched the parade of historic Indians, the Sioux, Iowas, Pottawattamies, Winnebagoes, and Sac and Foxes, as they passed in war and peace, for the red rocks of the Des Moines River from which the old tree springs are well known in the tales and legends of these people.

The vicinity is also rich with recorded history of both the white and red races. Prior to 1842 John Jordan's trading post, almost in the big tree's shade, exchanged gunpowder, trinkets, and booze for the Indians' fur catch. The old tree for the first time in 1837 heard the whistle of a steamboat, as Captain William Phelps' steamer Pavilion groaned up the river to Fort Des Moines. It watched the settlers

NAME OF PARK	SYMBOLS SP- STATE PARK RR- RECREATIONAL RESERVE LR- LAKE RESERVE SM- STATE MONUMENT SFR- STATE PARKWAY SW- STATE WAYSIDE SPP- STATE FOREST PRESERVE	ACREAGE	LOCATION BY COUNTY	LOCATION GIVEN FROM NEAREST TOWN TO PARK ENTRANCE	RESIDENT CUSTODIAN	NONRESIDENT CUSTODIAN	CABINS-RENTAL FEE	CAMPING-TWO WEEKS	CAMPING-OVERNITE ONLY	CAMPING-GROUP	SWIMMING-SUPV. BEACH	BOATING	FISHING-PAN FISH	FISHING-GAME FISH	HUNTING-UPLAND GAME	GOLF-GREEN FEE	LODGE-RENTAL FEE	LODGE-SERVING MEALS	SHELTER	REFRESHMENTS AVAILABLE	PICNICKING	TRAILS	HIKING	NATURE STUDY-BIRDS	NATURE STUDY-PLANTS	NATURE STUDY-GEOLOGY	MOTORING	HISTORICAL INTEREST	SCENIC VIEWS	
AREAS IN NORTHWEST IOWA																														
DOLLIVER	SP	498	WEBSTER	IOWA 30 & 121-4 MI. NORTH OF LEHIGH																										
LEDGES	SP	896	BOONE	IOWA 164-3 MI. SOUTH OF BOONE																										
STONE	SP	882	WOODBURY	NORTHWEST SECTION OF SIOUX CITY																										
BLACK HAWK	RR	353	SAC	US 71- IN TOWN OF LAKEVIEW																										
FT DEFIANCE	RR	181	EMMET	IOWA 9 & 245-1 MI. SW OF ESTHERVILLE																										
LEWIS & CLARK	RR	315	MONONA	IOWA 165-2 MI. WEST OF ONAWA																										
MILL CREEK	RR	157	O'BRIEN	IOWA 10-1 MI. EAST OF PAULLINA																										
OAK GROVE	RR	102	SIOUX	COUNTY ROAD-4 MI. NW OF HAWARDEN																										
EAGLE LAKE	LR	21	HANCOCK	COUNTY ROAD-4 MI. NE OF BRITT																										
LOST ISLAND	LR	32	PALO ALTO	COUNTY ROAD-2 1/2 MI. NE OF RUTHVEN																										
KEARNY	LR	45	PALO ALTO	ADJOINS TOWN OF EMMETSBURG																										
MINI-WAKAN	LR	20	DICKINSON	IOWA 276-6 MI. NE OF ORLEANS																										
OKAMANPEDAN	LR	19	EMMET	COUNTY ROAD-3 MI. NE OF DOLLIVER																										
OKOBOJI AREAS	LR	94	DICKINSON	LAKE OKOBOJI & VICINITY - INQUIRE																										
RUSH LAKE	LR	82	PALO ALTO	COUNTY ROAD-6 MI. NORTH OF LAURENS																										
STORM LAKE	LR	18	BUENA VISTA	ADJOINS TOWN OF STORM LAKE																										
SWAN LAKE	LR	229	CARROLL	COUNTY ROAD-3 MI. SE OF CARROLL																										
TRAPPERS BAY	LR	55	DICKINSON	IOWA 219-ADJOINS TOWN OF LAKE PARK																										
TWIN LAKES	LR	15	CALHOUN	IOWA 174-4 MI. N. OF ROCKWELL CITY																										
GITCHIE MANITO	SM	200	LYON	COUNTY ROAD-9 MI. NW OF LARCHWOOD																										
INDIAN VILLAGE	SM	5	O'BRIEN	COUNTY ROAD-4 MI. SE OF SUTHERLAND																										
AG SHARP CABIN	SM	1	DICKINSON	IN TOWN OF ARNOLDS PARK																										
BARKLEY	SM	40	BOONE	COUNTY ROAD-2 MI. NE OF FRASER																										
WOODMAN HOLLOW	SM	63	WEBSTER	COUNTY ROAD-3 MI. NORTH OF LEHIGH																										
HOLST	SFR	330	BOONE	COUNTY ROAD-NEAR FRASER																										
PILOT MOUND	SFR	33	BOONE	IOWA 329-ADJOINS TOWN OF PILOT MOUND																										
PREPARATION CANYON	SFR	186	MONONA	IOWA 372-5 MI. SW OF MOOREHEAD																										
WANATA	SFR	145	CLAY	IOWA 10-5 MI. SOUTH OF PETERSON																										
AMBROSE A. CALL	RR	130	KOSSUTH	ADJOINS TOWN OF ALGONA																										
AREAS IN NORTHEAST IOWA																														
BACKBONE	SP	1412	DELAWARE	IOWA 19-4 MI. SW OF STRAWBERRY POINT																										
MCGREGOR AREAS	SP	576	CLAYTON	US 15-IOWA 13 INQUIRE AT MCGREGOR																										
PILOT KNOB	SP	369	HANCOCK	4 MI. EAST-1 MI. SOUTH OF FOREST CITY																										
BEEDS LAKE	RR	259	FRANKLIN	3 MI. NORTHWEST OF HAMPTON																										
BELLEVUE	RR	149	JACKSON	US 52-SOUTH OF BELLEVUE																										
ECHO VALLEY	RR	101	FAYETTE	IOWA 56-3 MI. SE OF WEST UNION																										
HEERY WOODS	RR	380	BUTLER	IOWA 53-1/2 MI. SOUTH OF CLARKSVILLE																										
PINE LAKE	RR	548	HARDIN	IOWA 118-1/2 MI. NE OF ELDORA																										
PIONEER	RR	14	MITCHELL	COUNTY RD. 1 MI. SW OF RICEVILLE																										
RICE LAKE	RR	47	WINNEBAGO	COUNTY RD. 2 1/2 MI. SW OF LAKE MILLS																										
UNION GROVE	RR	270	TAMA	COUNTY RD. 3 MI. SW OF GLAD BROOK																										
WAPSIPINICON	RR	232	JONES	US 151- RESERVE ADJOINS ANAMOSA																										
CLEAR LAKE	LR	70	CERRO GORDO	IOWA 106-2 MI. S OF CLEAR LAKE																										
MCINTOSH WOODS	LR	60	CERRO GORDO	US 16-3/4 MI. EAST OF VENTURA																										
FT. ATKINSON	SM	5	WINNEBAGO	IOWA 24-NE EDGE OF FT. ATKINSON																										
TURKEY RIVER MOUNDS	SM	85	CLAYTON	US 52-4 MI. SOUTH OF GUTTENBERG																										
FISH FARM MOUNDS	SM	3	ALLAMAKEE	IOWA 182-7 MI. NORTH OF LANSING																										

cross the Red Rock line midnight, October 11 and 12, 1845, as the territory was opened to white settlers. It heard the guns sound on that occasion, the "land opening," which ended forever the empire of the red man. It watched the settlement of Red Rock become a bustling river town where saloons, murder and robbery were commonplace. It saw

the white man occupy the land and in a short century destroy much of the soil.

And now from where it towers in the river bottom, it is watching the same white man begin to put into effect on the surrounding hills soil conservation practices which will again build the region back to its original productive state.

IT NEVER FAILS

You can always spot the artistic fisherman—he uses a fly. And, brother, flies produce meat. A man and his wife had 11 nice trout and a lone fisherman had four. All of them were caught on flies and on a contrary day when the worm fishermen were skunked.

For my part—as an unpretentious

Iowa's Recreation Areas

NAME OF PARK	SYMBOLS - STATE PARK - RECREATIONAL RESERVE - LAKE RESERVE - STATE MONUMENT - STATE PARKWAY - STATE WAYSIDE - STATE FOREST PRESERVE	ACREAGE	LOCATION BY COUNTY	LOCATION GIVEN FROM NEAREST TOWN TO PARK ENTRANCE	RESIDENT CUSTODIAN	NONRESIDENT CUSTODIAN	CABINS-RENTAL FEE	CAMPING-TWO WEEKS	CAMPING-OVERNITE ONLY	CAMPING-GROUP	SWIMMING-SUPPLY BEACH	BOATING	FISHING-PAN FISH	FISHING-GAME FISH	HUNTING-UPLAND GAME	GOLF-GREEN FEE	LODGE-RENTAL FEE	LODGE-SERVING MEALS	SHELTER	REFRESHMENTS AVAILABLE	PICNICKING	TRAILS	HIKING	NATURE STUDY-BIRDS	NATURE STUDY-PLANTS	NATURE STUDY-GEOLOGY	MOTORING	HISTORICAL INTEREST	SCENIC VIEWS	PARK NATURALIST
XBY	SM	69	CLAYTON	COUNTY ROAD - 2 MI. NORTH OF EDGEWOOD																										
TIONAL MONUMENT	SM	568	CLAYTON & ALLAMAKEE	ON YELLOW RIVER VIC. OF MC GREGOR				2	0	T			D	E	V	E	L	O	P	E										
QUOKETA CAVES	SM	111	JACKSON	IOWA 130 - 7 MI. NW OF MAQUOKETA																										
VER MEADOW	SW	74	BUTLER	IOWA 14 - 1/2 MI. NORTH OF PARKERSBURG																										
PLEY	SW	9	HARDIN	IOWA 215 - 2 MI. SOUTH OF GIFFORD																										
LVER LAKE	SW	15	DELAWARE	IOWA 36 - ADJOINS TOWN OF DELHI																										
LAMBOAT ROCK	SW	5	HARDIN	IOWA 118 - ADJOINS STEAMBOAT ROCK																										
LODGE F. CLARK	SW	24	TAMA	US 63 - 4 MI. NE OF TRAER																										
SH HIGGINS	SPRY	173	BLACK HAWK	US 20 - ADJOINS TOWN OF CEDAR FALLS																										
SH CREEK CANYON	SFP	217	PAYETTE	IOWA 154 - 2 MI. NORTH OF ARLINGTON																										
HITE PINE HOLLOW	SFP	650	DUBUQUE	IOWA 10 - 3 MI. NW OF LUXEMBURG																										
LLOW RIVER	SFP	4104	ALLAMAKEE	VICINITY OF WAUKON JUNCT. & HARPER'S FERRY																										

AREAS IN SOUTHEAST IOWA

EODE SP	844	HENRY	US 34 - 3 MI. WEST OF DANVILLE																										
CEY-KEOSAUQUA SP	2216	VAN BUREN	IOWA 1 - 1 MI. WEST OF KEOSAUQUA																										
KE MACBRIDE SP	774	JOHNSON	IOWA 261 - 2.5 MI. WEST OF COLON																										
KE WAPELLO SP	1131	DAVIS	IOWA 273 - 6 MI. WEST OF DRAKESVILLE																										
LISADES-KEPLER SP	648	LINN	COUNTY ROAD - 35 MI. WEST OF MT. VERNON																										
LD CAT DEN SP	322	MUSCATINE	US 61 - IOWA 160 - 3 MI. E. & 1 MI. N. OF FAIRPORT																										
ARMINGTON RR	127	VAN BUREN	IOWA 214 - 1 MI. SW OF FARMINGTON																										
AKE KEOMAH RR	366	MAHASKA	IOWA 371 - 6 MI. SE OF OSKALOOSA																										
AKLAND MILLS RR	111	HENRY	IOWA 133 - 4 MI. SW OF MT. PLEASANT																										
ED HAW HILL RR	420	LUCAS	US 34 - 1 MI. EAST OF CHARITON																										
ARON BLUFFS RR	144	APPANOOSE	IOWA 3 - 35 MI. SE OF CENTERVILLE																										
OV. LUCAS HOUSE SM	5	JOHNSON	SOUTHEAST SECTION OF IOWA CITY																										
HALLAND SCHOOL SM	19	LEE	COUNTY ROAD - 3 MI. S OF MONTROSE																										
OODTHRUSH SM	25	JEFFERSON	COUNTY ROAD - 2 MI. SE OF LOCKRIDGE																										
E-VANBUREN SFP	3709	LEE-VANBUREN	IOWA 2 - EAST OF FARMINGTON																										
ICAS-MONROE SFP	4214	LUCAS-MONROE	VICINITY OF LUCAS & CHARITON																										
ATE NURSERY	100	STORY	US 69 - 1 MI. SOUTH OF AMES																										

AREAS IN SOUTHWEST IOWA

INE EAGLES SP	1083	DECATUR	COUNTY RD. - 3 1/2 MILES SE OF DAVIS CITY																										
PRINGBROOK SP	761	GUTHRIE	IOWA 25161 - 7 MI. NORTH OF GUTHRIE CENTER																										
AUBONSIE SP	600	FREMONT	US 275 - IOWA 26239 7 MI. SW OF SIDNEY																										
OLD SPRING RR	60	CASS	US 6 - IOWA 40 - 2 MI. SOUTH OF LEWIS																										
AKE AHQUABIS SP	774	WARREN	IOWA 345 - 5 1/2 MI. SW OF INDIANOLA																										
AKE MANAWA RR	939	POTTAWATTAMIE	IOWA 192 - 1 MI. S OF COUNCIL BLUFFS																										
HREE FIRES RR	386	TAYLOR	IOWA 49 - 3 MI. NW OF BEDFORD																										
AMMEL RR	289	MADISON	IOWA 524182 - 3 MI. SW OF WINTERSET																										
ALNUT WOODS RR	260	POLK	IOWA 80 - 8 MI. SW OF DES MOINES																										
LENWOOD SW	88	MILLS	US 275 - EAST EDGE OF GLENWOOD																										

tious fisherman—I'll stick by the garden hackle. The feel of a cool, wiggly worm in my fingers is next to the sensation of a slippery fish, and do I like to handle fish!

There seems to be a scorn for the worm fans, but I'll take the scorn for the results that I get. There is a little skill connected with worms, too—you have to know where and how to dig them, store them, carry them, and finally thread them. That's only the

beginning. You have to know how and where to put them if they are to produce.

Frisky worms attached to the hook scientifically work up their own clientele. You can't put the hook in a worm like you put your foot in a sock unless you are out for the fresh air. You attach the garden variety tenderly in a few spots. Give it all the liberty you can, firmly but gently. You'll need more than one worm, depending

upon the size of the hook. Fish are not looking for hooks, but worms, so display the correct wares. A good leader and a minimum amount of weight help much.

—Bellevue Leader.

Plenty Tough

Dissection proved that a wild horned owl suffered and recovered from these wounds: one wing broken once; one wing broken twice; one leg broken once; a splinter embedded in her breast; a toe sheared off in a trap; rifle and buckshot pellets.—Ohio Conservation Bulletin.

America's Bird Dogs



COCKER SPANIEL A MIGHTY MIDGET

By Jack Hewins

A bundle of affection and desire-to-please, tied in a cheerful, silky ribbon of almost any color is Little Joe Bounce, the cocker spaniel—the mighty midget of the bird dog clan.

His small stature, good humor and ability to squeeze a whole family into his sturdy little heart has almost made America forget that Little Joe is a hunting dog. His tribe is most numerous of all breeds at the bench shows, and American Kennel Club registrations mark him as the All-American pet, but beneath all this, deep inside his husky little chest, he's a huntsman.

About half the size of the springer spaniel, but of similar conformation, Little Joe is stubby-tailed, heavy-eared, long-haired. His forehead is high-domed, his eyes alert, and the way to start a fight with a cocker man is to call his pooch a "snipe nose."

For hunting tightly brushed country the cocker is an excellent worker, operating like the springer in rushing the game into the air. He's a natural retriever, easily trained for work in the fields or the duck blind.

He may be solid black, solid red, "blond" or particolored—black and white, liver or orange and white, blue roan, strawberry roan, lemon roan, black-tan-white—the combinations are almost innumerable.

He has fallen into two types, the rangy English bred cocker weighing as much as 30 pounds and the smaller American cocker of 18 to 24 pounds. He is called "cocker" because his chief job originally in England was woodcock hunting.

Little Joe probably developed from the slightly taller field spaniel, which may outweigh him 10 to 30 pounds. This dog, rather rare to America, usually is solid black. Another relative is the Sussex spaniel, a long-bodied, short-legged hunter about the weight of the field spaniel but even less well known in the United States.

—AP Newsfeatures, Reprinted by Permission of the Des Moines Register & Tribune.

Once in the air, the clumsy pelican "whose bill holds more than his belly can," is able to fly to a height beyond eyesight's reach.



This state forest plantation in Lee County is six years old. The gullied, abandoned fields have been stabilized and will begin to produce returns from thinnings in 10 to 12 years.

State Forestry . . .

(Continued from page 137)

fire problem is a community problem and, as such, should have the assistance of all available agencies.

Briefly, under the Clarke-McNary Act within budgetary limitations, the federal government, acting through the U. S. Forest Service, matches the forest fire funds made available by the different states. This cooperative effort has been outstanding in its results.

At the time of the passage of the Clarke-McNary Act a number of states in the central region, including Iowa, did not have serious forest fire problems. In these states, however, under this act this same cooperative principle was used to give state aid in renewing tree crops on cut-over and badly eroded land.

Iowa, since 1924, has been cooperating under this statute, at first through the office of the State Secretary of Agriculture and Iowa State College, and in recent years through the State Conservation Commission. The act has been one of the most effective influences in establishment of the State Forest Nursery, in subsequent planting of hundreds of acres on the state forests, and in furnishing tree seedlings at about cost for needed erosion control plantings on privately owned land.

Iowa 25-Year Plan

In 1931, through the timely influence of a group of far-seeing individuals, an outstandingly progressive step was taken in state conservation. The General Assembly that year adopted a joint resolution instructing the State Board of Conservation and the State Fish and Game Department to prepare a long-time program for handling our conservation problems.

The resulting study and report, the "Iowa Twenty-five Year Conservation Plan," recognized the relationship between soil, water, forests, parks, wildlife, and human inhabitants. It pointed out the need for a frontal attack on the basic conservation problems of the state. It noted that the soil losses through

erosion were not only general, but alarming, and that the several million acres of Iowa's remaining woodlands were soil savers, as well as lumber producers and water conservers that should be harvested as other lands but kept in timber production for continuous revenue.

Recommend Public Forests

Under this plan certain cut-over lands and badly eroded areas, many of which were not paying taxes, might properly come into state ownership for management as state forests. The plan suggested that some of the larger areas of poor rough land might be acquired and managed as national forests, with 35 percent of the gross revenue returned to the mother counties for road and school purposes, as in the larger national forests in the so-called "timber states."

Another recommendation of the Twenty-five Year Plan was reforestation of thousands of acres of land which held little or no promise for continued cultivation or forage production, that were headed for the abandoned lands scrap heap if not salvaged by an adjustment in use.

Forest and Waste Land Survey

In 1934 the state undertook a forest and waste land survey to determine the extent of eroded farm lands, forest areas, brush lands, swamps and waste areas not suitable for agricultural crops or forage production under existing economic conditions. The survey covered about three-quarters of the state, including the southern, eastern and western counties, and data for each quarter section were compiled. Maps prepared from the field data for each township in counties covered served in blocking up areas which in size and condition might be considered for state and federal forest land purchase areas.

State Planning Board

It was in this same period (1933-1934) that the Iowa State Planning Board made exhaustive studies on the resources of the state. The Board made a valuable contribution in furnishing an economic ba-

sis for adjustments in land use. It helped to crystallize thought on the need for publicly owned forests on non-agricultural lands.

The areas suggested for public forests were those which were already in timber and brush cover, or badly eroded tracts in such condition that restoration to a productive state by the private owners was questionable. State or federal ownership of these areas was based upon the assumption that the community has an obligation to keep the basic resources productive if it is beyond the power of individual owners to do so. The State Planning Board Reports make definite recommendations as to areas where either state or national forests might be appropriate from an economic standpoint.

Civilian Conservation Corps

Another agency which made important contributions to Iowa's state forestry program was the Civilian Conservation Corps, authorized by Congress in March, 1933. This agency made possible a greatly accelerated conservation program. A peak of 35 Iowa camps of 200 men each was reached in 1935. The work included extensive development work of all kinds in state parks, on state lakes, and on state forest areas which were being acquired through the cooperative program known as the "Iowa Emergency Conservation Works Program," to be mentioned later.

The Civilian Conservation Corps effort was initiated soon after the completion of the Iowa Twenty-five Year Conservation Plan, and as a result of this study the state was in a position to submit detailed plans immediately. By taking advantage of emergency labor, developments were completed in a relatively short period which under normal conditions might have required 10 to 20 years to accomplish.

Emergency Conservation Works Program

Concurrently with the Civilian Conservation Corps came the Iowa Emergency Conservation Works Program, a most potent move by the state to capitalize on relief labor made available by the federal programs.

State cooperation resulted in furnishing state directing personnel and plans, as well as appropriating substantial funds by the legislature. These appropriations were \$100,000 in 1934, \$500,000 in 1935, and \$500,000 in 1937. These monies were specifically provided to further conservation work under the Civilian Conservation Corps and later relief programs.

The appropriations of 1934 and 1935 especially were effective in the development of both state parks and state forests. In the

former many improvements were made which, without special state funds, would have been impossible; artificial recreational lakes were built, additional areas added to existing parks, and new parks purchased and developed where needed.

First State Forest Areas

The first purchases of state forest lands were made possible through the above state funds. The purchases were started in three different localities where physical conditions made it possible to acquire considerable areas which could be consolidated for convenience and efficiency in administration, protection and management.

The purchases which were made were in the south central, south-eastern, and northeastern parts of the state. The tracts secured included cut-over woodlands, brush-covered areas, badly eroded lands and, to a limited extent, worn-out cultivated fields. The non-agricultural character of the lands acquired is indicated by the prices paid as shown in the table below.

Iowa has made a fine beginning on a state forestry program—but it is only a beginning. There is much to be desired. Additional public forest areas should be acquired and put under "multiple use" management for the good of the entire state.

Forestry in Iowa goes far beyond the acquisition and management of limited publicly owned forest lands, for as important as public forestry is, even more important is the task of keeping thousands of farm woodlots productive and serving as useful revenue producing units of the farm. The state has an obligation here also and should aid in developing the forestry possibilities on private land as well as on the public areas.



This state forest area in Lucas County will produce a regular income from saw logs and other products, and at the same time is valuable for soil erosion protection, wildlife cover, and forest land recreational area.

	Number of Ownerships	Total Acres Acquired	Range of Prices	Average Price per Acre
South Central Area	16	3,583	\$8.25-\$13.00	\$11.33
Southeast Area	24	3,671	\$6.00-\$10.50	\$ 8.63
Northeast Area	23	3,800	\$4.00-\$10.00	\$ 8.44
Totals and Averages	63	11,054	\$4.00-\$13.00	\$ 9.44

Butterflies . . .

(Continued from page 139)

richly colored velvety orange and blue-black. The silvery spots beneath are tinged green and are angular in shape. The caterpillar feeds on prairie violets in Iowa and is most frequently seen where small bits of prairie still remain.



The Great Spangled Fritillary
($\frac{1}{2}$ natural size)

This is the largest of three closely related fritillaries which are distinguished by having rows of large silvery spots on the lower surface of the hind wings. This species has a wide buff band between the rows of silver spots on the hind wings. The caterpillars feed on several species of violets.



The Tiger Swallow-tail
($\frac{1}{2}$ natural size)

This is a large yellow butterfly with black bars that suggest tiger stripes. There are two color forms of this insect; the black form occurs only in the female sex. The caterpillars feed on birch, ash, cherry, and many other trees and shrubs. It winters in the chrysalis stage and the adults appear after the first warm days of spring.

FRANKLIN DELANO ROOSEVELT, CONSERVATIONIST

In the passing of Franklin Roosevelt conservation has lost a true friend. He was an active and ardent sportsman all his life, even after he was stricken with polio. He loved the out-of-doors and as President gave it greater consideration than it had ever before had. He talked the sportsman's language, he knew the thrills of hunting and fishing. In all the years in the White House he never failed to do all that was asked of him for conservation. He appreciated and understood the interrelationship of soil and water conservation with wildlife as no other President ever did.

His voice is still, but his contribution to the cause of conservation,



The Tiger Swallow-tail
(Dark Form, $\frac{1}{2}$ natural size)



The Giant Swallow-tail
($\frac{1}{2}$ natural size)

This is the largest of our butterflies and may be distinguished by the black color and yellow marks. While not abundant, it may be seen in central Iowa.



The Zebra Swallow-tail
($\frac{2}{3}$ natural size)

This species is quite remarkable for the long and slender "tails" on the hind wings. It is also one of the most beautiful. The cross stripes on the wing in yellow and black suggest the name, Zebra. While scarce, this gorgeous butterfly may be seen in Iowa.

as well as to humanity and the world, will live as long as there are people to read and understand.

—National Wildlife Federation.

"It is natural that women should like the birds whose domestic affairs can be observed under the eaves; they love the sweetest singers, the brightest plumage, the species not too shy to be seen at close range. For them the waders and swimmers, the awkward of leg, the harsh of cry, the wild of soul, have seldom the same appeal. But that which flees from men, that will men have. Women of all people ought to understand this, but they do not, quite."

—Donald Culross Peattie.

"To a person uninstructed in natural history, his country or seaside stroll is a walk through a gallery filled with wonderful works of art, nine-tenths of which have their faces turned to the wall."

—Thomas Henry Huxley.

"There are no birds this year in last year's nests."

—Cervantes.

YOUR BOY AND MINE

IF YOU are a fisherman and fortunate enough to be the father of a son but inconsiderate enough never to have taken him along fishing, then you have failed, failed miserably, in an important responsibility you owe him. Would you deliberately allow your child to suffer the bitter pangs of disappointment and base denial if it were easy for you to effectively prevent it? No, of course you wouldn't! Yet how many men are doing that very thing every day? Sad little hearts made sadder, hurt and bleeding for the companionship of a father.

Remember, there is no man bigger, no hero greater, no admiration more sincere, and I sometimes suspect that no love supersedes the love that reposes in the heart of a little boy for his dad.

Did you ever allow your enthusiasm, your anxiety, your fishing fever to get the best of you long before the opening day of the season? Sure you have; we all have. You get the old tackle box out and begin checking it over. A rod needs a few new wrappings or a coat of varnish, a line needs to be oiled or some new leaders tied. Reels to be fixed, flies to be tied! You yearn to get into the feel again.

Out Fishin' With Dad

You are in the kitchen of your home, the den, or perhaps out in the garage, and you're all wrapped up in things of sport. Up to your chin in a job the likes of which is greater than all else at the moment. And standing there beside you, watching you, is your boy. His eyes bright with admiration, his pulse is rapid and the blood races through his little body, as he envisions his first trip "out fishing" with dad. Listening attentively and affectionately to every last word as you relate some of the experiences you have had with this or with that, and before you know it he, too, can hardly wait for the opening day of the season.

Do You Remember?

Can you remember, perhaps a day long since gone—a day when as a little fellow you crawled up on the back of a swell guy, and clinching your heels into his belly while you held aloft a rod in each hand, your dad negotiated the slippery bed of a swift stream and carefully placed you on the other side? Well, this little fellow unconsciously is longing for that very same experience.

Comes the day, the appointed hour arrives. The tackle and equipment, together with the lunch, is placed in the car and you dash out around the block to pick up your companions. Returning to the house teeming with the excitement and hilarity that only we fishermen can know, you hurriedly rush in for that last item and to say goodbye.

Something Is Wrong

Crawling back into the car you suddenly realize a void, something wrong. You look back and there he stands, your boy, or little girl, for that matter. There he stands on the porch with his mother. His eyes, no longer gleaming with excited happiness, are clouded with welling tears, tears that betray his disappointment. Hurt and forsaken, he suddenly realizes that he cannot go along, and he wanted so much to go. He believed that he had been counted in. There he stands, cheated and betrayed by his own father! The greatest, wisest, truest man in all the world has smashed his fondest dream.

No Room in Dad's Car

The motor starts and you begin to drive away. Somehow, something is pulling, something you can't explain compels you to look back once more to see your little boy trembling with convulsive misunderstanding as he buries his face in the bosom of his mommy to cry his very soul out. Cries because he couldn't go along, because there wasn't room. No room in dad's car!

Room for strangers, but no room for your own boy!

Make room! Be the companion he wants you to be and take him along fishing. If you do this, I assure you you'll never be sorry. Who knows how soon you may have tragic reason to be glad that you did?

If there is to be any solution to the many perplexing problems of conservation, I say we need to take our boys and girls along out fishing. They are entitled to share and enjoy this birthright, their own heritage, the natural resources of our great outdoors. Take them along, out there in the same environment where a courageous and determined ancestry fought for and cradled this great nation of free men. Make your child, your boy or your neighbor's boy an everlasting integral part of it.

(Continued on page 144)



Take your boys and girls along fishing. They are entitled to share and enjoy this birthright.

FROM SUPERSTITION TO ORNITHOLOGY



"Death," wails the little owl, and the superstitious believed the worst. But heat the poker red hot and he'll go away. Gone are those days, and even a child now knows that owls are harmless and a valuable aid in pest control.

A red owl wails from the rooftop and in the house beneath there is fear. "Death," wails the little owl, and the superstitious believe in the worst. "Death," quavers the owl . . . but throw a handful of salt on the fire, lay a broom across the doorsill, heat the poker red hot, and he'll go away. Fear of the owl is an old, old superstition that goes back to the Indians and their belief in him as a harbinger of death. Superstitions about birds are of ancient lineage.

People in the past were ever alert to signs and omens. It was the one way folks had of getting in touch with the peculiar workings of the universe.

And so it came about that much strange lore became attached to the actions of birds. When a little red screech owl perched on the roof and wailed, folks wondered what it meant. Perhaps someone in the household was very ill; perhaps that night he died. How reasonable then, in the light of the times, to say that the owl had foretold the calamity, perhaps even had brought it to pass. The superstition grew and endured, just as the belief grew that a bird which somehow got indoors or down the chimney was bad luck and foretold death.

Woodpecker on the Roof

Bad luck omens, particularly those having to do with death, were connected with many other birds. There was the woodpecker who hammered on a rooftop or gable and foretold disaster, the bird pecking on the window pane, the cooing of the dove, the calling of a cuckoo near the house, the whimpering cry of a whip-poor-will—all evil. Fortunately there were antidotes for some of these. In the case of the whip-poor-will, the harm might be averted by pointing one's finger sternly at the bird's head—if you were able to see it in the darkness.

Although almost all such beliefs are without any foundation of fact, some bird superstitions seem to be based on observation. For instance, in Maine if a farmer saw

a robin in March, he feared a failure of crops—a too early spring might bring on later freezes. In Nova Scotia when the willow ptarmigan perched high in trees, the people expected a deep snowfall. It was a sign of rain when the crows flew low, a sign of clearing when the chimney swifts flew high. High-flying gulls meant a heavy wind coming off the sea.

Superstition—Conservation

Early attempts at bird conservation—though no one knew it by that name—were affected at times by threatening bird-killers with "Kill a robin and the cows give bloody milk," or "Kill the swallows and you'll have bad luck," or "Kill an eagle and you'll bring misfortune." It was believed, and with a reason, that swallows nesting in a barn brought prosperity.

Yet through it all ran the trend of rank superstition—that from eggs set on Sunday only roosters will hatch; that jaybirds aren't seen on Friday because they're busy carrying sticks to the Devil; that snowbirds turn into chipping sparrows in summer; that a buzzard feather worn behind the ear will prevent rheumatism; that a redbird flying across the road means you'll get a letter.

Yearly, superstitions fade as honest observation increases. The actions of birds, no longer observed in the distorted light of superstition, are studied for their true meaning in the wildlife pattern, and for the downright good fun and pleasure that is to be had in modern birding.

—The Living Museum.

Your Boy and Mine . . .

(Continued from page 143)

Take Time, Make Room

Take time to point out and instruct them in the many phases of woodcraftsmanship, the countless essentials so important to the conservation of our forests, the trees, the streams, animals, birds, our fish, the flowers and plants. Set the proper example and you will produce a conservationist. A rising generation of understanding, clean, honest citizens imbued with the will to preserve. I know of no other medium or environment wherein can be created and molded real red-blooded Americanism as compares with the noble and rather sacred laboratory of our own outdoors.

So I say to you, take your child along, be his companion, chum up with your own boy. Let his hurts be your hurts. Your hurts, whether you know it or not, are already his, and in his faithfulness he is constantly willing and ready to fight to the very death if necessary in your defense. As a small tree is nourished, so it grows to maturity—either a straight asset or a twisted liability. Don't cheat him, don't deny and neglect him, and don't wait until it may be too late. Do it NOW!

—By J. Allen Barrett, from the "Pennsylvania Angler."

THREE BILLION DOLLARS FOR HUNTING AND FISHING!

Hunting and fishing are sports which will play a far more prominent part in the recreational picture of the postwar world than they have in the past. This is the prediction of a Remington Arms Company authority.

These sports are participative sports. One doesn't sit in a grandstand and watch the other fellow hunt or fish. If he likes these healthy sports, he does the pleasant job himself—and definitely does NOT want an audience. Companionship? Sure! But not an audience!

In peace times more than 20,000,000 Americans hunt or fish—or both, according to "Nation's Business." A conservative estimate of their individual annual expenditures in the enjoyment of their favorite sports could be set (for round numbers) at \$100. This includes equipment, travel, and odds and ends, the description of which would require the space of a sporting encyclopedia.

Summed up, this means that, in peace times, the American sportsmen were spending \$2,000,000,000 a year for their favorite sports—and liking it. It is our prediction that "when the boys come home" they'll want to relax—and hunt and fish. And they'll also be more than willing to do their share toward maintaining a goodly supply of game and fish for this and future generations.

Wildlife has had a rest during the present war. Certain species have increased to such an extent that control measures have been necessary. This, however, is not a normal situation, and "when the boys come back" they'll be mighty happy to reap the so-called surplus crop.

Some authorities believe that sportsmen and returning service men, eager to enjoy peacetime hunting and fishing, may bring the annual postwar hunting and fishing expenditure up to as much as \$3,000,000,000.

These figures may seem rather fantastic to some. The average baseball fan spends about \$30 a

Outdoor Oddities

BY WALT HARVEY

THE HEART OF THE FIELD MOUSE BEATS AT THE RATE OF 250 PER MINUTE.



year for his tickets. He doesn't need new equipment to sit in the grandstand and cheer for the home team. And he doesn't have to pay much for transportation to and from the ball park.

It's a somewhat different story with the hunter or the angler. He is, in a major way, a **participator**, and in a minor way, a **spectator**. He has to replenish his expendable equipment every season, but the anticipation of using his new rods, lures or guns makes up for the dent in his pocketbook.

His equipment is not the whole story. Travel, food, lodging and many other factors enter the picture of his expenditures. Items too numerous to mention—but you can bet that a larger annual expenditure by sportsmen in the postwar period is not too much to expect.

—Remington News Letter.

"If you have once planted a tree for other than commercial purposes—and in that case it is usually done by your orders and by the hands of hirelings—you have always in it a peculiar interest. You care more for it than you care for all the forests of Norway or America. You have planted it, and that is sufficient to make it peculiar amongst the trees of the world." —Alexander Smith.

Six hundred million pounds of seafood are caught by New England fishermen in a normal year . . . 85 percent of this consisting of only 10 species.



Hunting and fishing are sports which will play a far more important part in the postwar recreational picture than they have in the past. Conservative businessmen estimate the yearly postwar hunting and fishing expenditure will reach \$3,000,000,000.